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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/668,527

09/23/2003

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EXAMINER

BURROWES, LAWRENCE J

ART UNIT

PAPER NUMBER

2616

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/668,527

Applicant(s)

KARAOGUZ, JEYHAN

Examiner

LAWRENCE J. BURROWES

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 16, 17, 27, 28, 39, 48, 50 and 57 is/are rejected.
- 7) ☒ Claim(s) 3-15, 18-26, 29-38, 41-47, 49, 51-56 and 58 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 16, 17, 27, 28, 39, 48, 50 and 57 are rejected under 35 U.S.C. 102(e) as being anticipated by Parry (7,149,529).

For claims 1, 2, 39, 40 and 48, Parry disclose a WPAN (Wireless Personal Area Network) (**see Figure 4, wireless network made up of communicating devices**), the WPAN comprising: a PNC (piconet coordinator) (**see Figure 4 Box 14, host**); a plurality of DEVs (user piconet devices) (**see Figure 4 Box 14, users**); wherein the PNC transmits UWB (Ultra Wide Band) pulses to each DEV

within the plurality of DEVs (**communication between devices are streams or pulses**); wherein after receiving its respective UWB pulse, each DEV within the plurality of DEVs transmits a UWB pulse back to the PNC (**see column 4 lines 56-66, UWB signals are used for the host and users to communicate with each other**); wherein the PNC performs ranging of the relative position of each DEV within the plurality of DEVs using the time duration of round trip time of the transmitted UWB pulse and the received UWB pulse thereby determining the relative distance between the PNC and each DEV within the plurality of DEVs (**see column 4 lines 56-67 and column 5 lines 1-6, the distance/location module determines the location/distance of the user from the host**); wherein, based on the ranging of each DEVs of the plurality of DEVs, the PNC groups the plurality of DEVs into at least two groups and identifies a corresponding profile for each group; and wherein the profile of each group governs the communication between the DEVs of that group and the PNC (**see column 5 lines 55-64 and column 7 lines 39-54, depending on the distance the users are grouped in different access zones**); wherein: the WPAN includes a first piconet and a second piconet (**see Figure 4, zone 1 is first piconet and zone 2 is second piconet**); the PNC is a first PNC (**see Figure 4 Box 14 in zone 1**); the plurality of DEVs is a first plurality of DEVs (**see Figure 4 box 12 in zone 1**); the second piconet includes a second PNC (**see Figure 4 Box 14 in zone 2**) and a second plurality of DEVs (**see Figure 4 box 12 in zone 2**); the first PNC and the second PNC perform ranging of all the

DEVs of the first plurality of DEVs and the second plurality of DEVs using transmitted and received UWB pulses to and from each of the DEVs of the first plurality of DEVs and the second plurality of DEVs (**see column 5 lines 55-64 and column 7 lines 39-54, depending on the distance the users are grouped in different access zones**); and based on the ranging of all of the DEVs, the first PNC and the second PNC operate cooperatively to group each of the DEVs of the first plurality of DEVs and the second plurality of DEVs into either the first piconet or the second piconet (**see column 5 lines 55-64 and column 7 lines 39-54, depending on the distance the users are grouped in different access zones**).

further comprising: monitoring the relative positions of each DEV of the plurality of DEVs with respect to the PNC; and based on a change in position of at least one DEV of the plurality of DEVs with respect to the PNC, modifying the profile assignment that corresponds to the at least one DEV whose position has changed

For claims 16, 17, 50 and 57, Parry disclose a WPAN (Wireless Personal Area Network) (**see Figure 4, wireless network made up of communicating devices**), the WPAN comprising: a PNC (piconet coordinator) (**see Figure 4 Box 14, host**) that include GPS (Global Positioning System) functionality that is operable to determine the specific location of the PNC within the WPAN (**see column 6 lines 54-60, host includes GPS to determine location of itself**); a

plurality of DEVs (user piconet devices) **(see Figure 4 Box 14, users)**; wherein each DEV of the plurality of DEVs includes GPS functionality that is operable to determine the specific location of that DEV within the WPAN **(see column 6 lines 54-60, users includes GPS to determine location of itself)**; wherein each DEV of the plurality of DEVs communicates information corresponding to its specific location to the PNC **(devices in specific zones communicate to the host in order to gain access in the specific zone)**; wherein, based on the specific locations of each DEV of the plurality of DEVs with respect to the PNC, the PNC groups the plurality of DEVs into at least two groups and identifies a corresponding profile for each group **(see column 5 lines 55-64 and column 7 lines 39-54, depending on the distance the users are grouped in different access zones)**; and wherein the profile of each group governs the communication between the DEVs of that group and the PNC **(see column 5 lines 55-64 and column 7 lines 39-54, depending on the distance the users are grouped in different access zones in which they communicate)**; wherein: the WPAN includes a first piconet and a second piconet **(see Figure 4, zone 1 is first piconet and zone 2 is second piconet)**; the PNC is a first PNC **(see Figure 4 Box 14 in zone 1)**; the plurality of DEVs is a first plurality of DEVs **(see Figure 4 Box 12 in zone 1)**; the second piconet includes a second PNC **(see Figure 4 Box 14 in zone 2)** and a second plurality of DEVs; each DEV of the second plurality of DEVs **(see Figure 4 Box 12 in zone 2)** includes GPS functionality that is operable to determine the specific location of each DEV of the

second plurality of DEVs within the WPAN (**see column 6 lines 54-60, users includes GPS to determine location of itself**); each DEV of the second plurality of DEVs and of the first plurality of DEVs communicates information corresponding to its specific location to the first PNC and to the second PNC (**devices in specific zones communicate to the host in order to gain access in the specific zone**); and based on the specific locations of each DEV of the first plurality of DEVs and of the second plurality of DEVs with respect to the first PNC and the second PNC, the first PNC and the second PNC operate cooperatively to group each of the DEVs of the first plurality of DEVs and the second plurality of DEVs into either the first piconet or the second piconet (**see column 5 lines 55-64 and column 7 lines 39-54, depending on the distance the users are grouped in different access zones in which they communicate with either the first host in zone 1 or the second host in zone 2**);

wherein: the PNC detects a change in position of at least one DEV of the plurality of DEVs that has been grouped into a first group; and based on the change in position of the at least one DEV of the plurality of DEVs, grouping the at least one DEV of the plurality of DEVs into a second group (**see column 7 lines 39-54, if the users move into different zones then it will change the position and the host in the other zone will let it gain access and it will communicate with the new host**).

For claims 27 and 28, Parry disclose a WPAN (Wireless Personal Area Network), the WPAN comprising: a first PNC (**see Figure 4 Box 14 in zone 1**); a second PNC (**see Figure 4 Box 14 in zone 2**); a plurality of DEVs (user piconet devices) (**see Figure 4 Box 12, users**); wherein the first PNC and the second PNC transmit UWB (Ultra Wide Band) pulses to each user DEV within the plurality of DEVs (**see column 4 lines 56-66, UWB signals are used for the host and users to communicate with each other**); wherein after receiving its respective UWB pulse, each DEV within the plurality of DEVs transmits a UWB pulse back to both the first PNC and the second PNC (**see column 4 lines 56-66, UWB signals are used for the host and users to communicate with each other**); wherein both the first PNC and the second PNC perform ranging of the relative position of each DEV within the plurality of DEVs using the time duration of round trip time of the transmitted UWB pulse and the received UWB pulse thereby determining the relative distance between the first PNC and the second PNC and each DEV within the plurality of DEVs (**see column 5 lines 55-64 and column 7 lines 39-54, depending on the distance the users are grouped in different access zones in which they communicate**); wherein, based on the ranging of each DEV of the plurality of DEVs, the first PNC and the second PNC operate cooperatively to group the plurality of DEVs into at least two groups and also operate cooperatively to identify a corresponding profile for each group; and wherein the profile of each group governs the communication between the DEVs

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of that group and either the first PNC or the second PNC (see column 5 lines 55-64 and column 7 lines 39-54, depending on the distance the users are grouped in different access zones in which they communicate with either the first host in zone 1 or the second host in zone 2).

Allowable Subject Matter

4. Claims 3-15, 18-26, 29-38, 41-47, 49, 51-56 and 58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Callaway, Jr. et al (6275500), Johansson et al (2002/0044549), Larsson et al (6751200), Gilkes et al (6700535) Dooley et al (6646603), Gouge et al (2003/0208595) and Veschl (7212827).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAWRENCE J. BURROWES whose telephone number is (571) 270-1419. The examiner can normally be reached on Monday - Thursday 5:30am - 2pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan D. Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJB



EDAN ORGAD
PRIMARY PATENT EXAMINER

Edan



7/19/07